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AFFECT AND COGNITION IN SCHOOL READINESS:  
AN EXPERIMENTAL STUDY IN COMPENSATORY  
PROGRAMS FOR THE DISADVANTAGED CHILD

by



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A THESIS

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## ABSTRACT

The investigation studied the effects of "cognitive" and "affective" pre-school programs designed to facilitate increase in readiness for school in "disadvantaged" children. The measurements employed to test the respective effects of the programs were the Metropolitan Readiness Test and the Social Behaviour Scale.

The sample was drawn randomly from a designated area of the City of Edmonton. For the selection, the criterion of "Low Probability for School Success" was employed and those who qualified were randomly distributed into the cognitive, or "Readiness", and affective or "Playschool" groups.

At the conclusion of the programs all members of the two groups were tested on both instruments. The Metropolitan Readiness Test was administered to the children in groups, while the Social Behaviour (Rating) Scale was filled out by the respective group leaders. To measure the judges' reliability their findings were correlated with the judgments of an independent coder.



The data indicated that there were no statistically significant differences between the means of the scores of the two treatment groups on the Metropolitan Readiness Test, while the affective or "Playschool" group obtained a significantly higher mean score on the Social Behaviour Scale. However, the results of the two treatment groups on the criterion measure of Readiness for School were almost identical. The conclusion, according to the findings is that neither of the two treatment approaches produced measurable differences in readiness for school. This finding supports the general hypotheses of the study.



## CHAPTER I

### INTRODUCTION TO THE PROBLEM

Currently, attention is focused on the age old problem and all important question of readiness for school, upon which much of a child's success and happiness in school depends.

The Forums of the Golden Anniversary White House Conference on Children and Youth (1960) recommended further research "into the readiness of the young child for group experience in nursery school, kindergarten, and first grade, in order to establish criteria for enrollment 'other than chronological age'" (Brenner, 1965).

The review of the related literature suggests that we have no real understanding of what readiness for school is, consequently, we have no sound criteria for school admission policy, remedial work, or prediction of success in school (Brenner, 1957; Luttgen, 1962). The recommendation of the White House Conference also points to a possible reason for our lack of adequate criteria; research workers have long been approaching this problem as single-trait concepts (Brenner, 1957) providing only bits of information



without attempting to integrate the findings.

A broad front approach was initiated by the Merrill-Palmer Institute's research project (1953) in order "to explore this multi-dimensional complexity which we call Readiness for School" (Brenner, 1957). The broad approach seems more urgently needed since evaluations of the various forms of compensatory education for the disadvantaged have produced something less than laudatory testimonials. The basic theoretical foundations for Head Start, Higher Horizons, and others were derived from an "evidence supported" uni-dimensional cognitive framework, nevertheless, up to date they have "provided little definitive evidence on their effects" (Goldberg, 1966), they failed "to show any increase in school achievement" (Jansen, 1966), "to improve later learning" (Goldberg, 1966) or to reduce the dropout problem (Jansen, 1966).

More recently the possible significance of affect in the disadvantaged child's unreadiness for formal school learning was examined by researchers (McCoy and Zigler, 1965; Hofmann, 1967; Zigler and Butterfield, 1968; Pedersen, 1968). Their findings signify the importance of affect in relation







to cognition and support Bronfenbrenner's (1963) quest for a convergence between the cognitive and affective approaches "with each incorporating and applying the concepts and concerns of the other" (p. 541).

Consequent to the difficulties mentioned, the purpose of the Pre-School Demonstration Project and of this study was to examine which of these two approaches play a more significant role in preparing the disadvantaged child for school.



## CHAPTER II

### THEORETICAL FRAMEWORK

#### An Integration

One can not start out with a single factor design and hypothesize that "verbal fluency is an indication of readiness", a "child who can count to 100 is ready for school", "body size suggests readiness, or the ability to adjust socially" (Brenner, 1962). Readiness for school is not a single trait or a dimension in one's personality makeup. Nor is it a condition one attains automatically by advancing age or by a specific age.

Readiness for school may be seen as a dynamic state composed of many learnings and skills in constant transition and change directed toward specific tasks. It functions on a continuum ("law of continuity", Leibnitz) and its direction and task oriented intensity is determined by the personality's multi-dimensional aspects and their cross-involvement.

Readiness for school is a specific functional potentiality or receptivity in which the disadvantaged child is lacking. The aim of the various preschool programs is to



increase its intensity and direct it toward specified tasks. The review of the related literature indicates that at the present time two different approaches, one with cognitive and the other with affective orientation, are considered as possible ways by which readiness for school may be increased in the disadvantaged child.

The approach taken here accepts the cognitive and affective domains as crucial ones in facilitating increased readiness for school. It also attempts to examine their respective functions and their cross-involvement or inter-relatedness in attempting to provide the disadvantaged child with a new "Leitmotiv", or a new, but lasting central theme.

The integrative approach taken essentially is a developmental one in nature. It recognizes the changeability of human behaviour, the role of learning which comes about via interaction between an individual and stimulus in space over time. It also considers the significance of interaction between the environment and individual, and the existence of and necessity of a motivational system. This integrative attempt follows Bronfenbrenner's (1962) quest for the convergence between the cognitive on the one hand,



and the social-emotional approach on the other, in human development, "with each incorporating and applying the concepts and concerns of the other" (p. 541). This theoretical approach also is an attempt to deal with Allport's third riddle of progressive paradoxes (1943), in a special context, ie., how do we account for the total personality-integration and unity of personality manifestation in attempting to answer how the child learns.

Obviously, dealing with either one of these two dimensions without the other is grossly inadequate to deal with this riddle. Furthermore, a uni-dimensional approach is equally as inadequate in explaining the concept of readiness for school, especially in the development of the disadvantaged child where cognition in a general sense could represent learning and affect the total personality and its manifestations.

Few research workers of today will deny the importance of affect and cognition and their interrelatedness in human development as well as in readiness for school. Their importance was recognized by the patriarch of the cognitive psychology, Piaget, who saw the cognitive and affective







domains as "interdependent in functioning--essentially two sides of the same coin" (Inhelder, 1963). Furthermore, he viewed these two domains as "indissociable in real life" (Piaget, 1953-54), which can be separated only for discussion purposes. He viewed their interrelated functioning to be necessary in all human adaptation (Inhelder, 1963). Regardless of his lifelong interest in intelligence, Piaget places equal emphasis on these interrelated dimensions in the development of the child. It is mostly his disciples who urge the "need to see the realm of the affective-personal-social in its cognitive context" (Inhelder, 1963), and intelligence as the fostering and inhibiting determinant of personal-social-affective behaviours (Inhelder, 1963).

From the point of view of human development, Piaget assumes that affect evolves from the same primary processes as its cognitive counterpart. During the early stages of the sensory-motor phase (ages: 0-2 years) with the development of the roots of future cognitive understanding, the affective processes also appear. This notion is a crucial one in Piaget's notions on development; to him these two domains develop together with parallel forms of organization from birth on (Inhelder, 1963; Maier, 1965).



As for the affective innovations found at the same age ....as usual, we find that they are parallel to intellectual transformations, since affectivity can be considered as the energetic force of behaviour whereas its structure defines cognitive functions. (This does not mean either that affectivity is determined by intellect or the contrary, but that both are indissociably united in the functioning of the personality.)

(Inhelder and Piaget, 1958)

The various interpretations of the last statement of this quotation has produced a great deal of controversy and the furthering of the rift between the affective and cognitive approaches to human development, consequently, to readiness for school. Workers with a cognitive approach seem to disregard the fact that even Piaget stated that the structure of the affect defines the cognitive functions (Inhelder and Piaget, 1958). The interpretation of defining a function may mean to limit, to outline, and even to determine acts or operations, in this case, that of the cognitive domain. To this writer the above means the primacy of the affective structures in human development and primacy of affect also in readiness for school, which also is viewed as a developmental phenomenon.

Depending on the broadness of one's definition of affect, it is possible to find a great amount of supporting



evidence, especially from more recent studies. Affect here is used as a global term, referring to a large collection of the dynamic aspects of the personality. The concept here covers--amongst others--one's drives, strivings, motives, needs, emotions, tension systems, determining tendencies, attitudes and values (Rapaport, 1943), all which are part of the affective domain we are attempting to deal with.

If the above definition and description of the affective domain is acceptable, one can find a great amount of research supporting the notion of the primacy of affect, both in development and in readiness for school. Merleau-Ponty (1960) described how the dynamic aspects of one's personality patterns his cognitive style, specifically, how one's emotional response to a stimulus determines his perception of that stimulus (p. 100). He also quotes the related findings of Jaensch (1930) and Frenkel-Brunswik (1949) to support the notion that personality styles and feeling tones influence perception, cognition, and relations with others (p. 101).

Furthering the significance of the affective domain from the general to the specific, ie., to intellectual





functioning, one finds support again from Rapaport (1943). According to him the affective dimension is "determining and organizing--not merely facilitating or inhibiting certain types of intellectual functioning...." (p. 242). To Ach affect is a "determining tendency", to Tomkins (1962) it is the "primary motivational system". To Murphy (1958) affect is an important determinant of creative behaviour.

According to the quoted opinions, affect may be viewed as the primary motivational system providing propensity to learning and perceiving phenomena in specific ways. In short, it may be seen as a domain providing impetus and directionality to cognitive functioning.

Once the significance of affect is established in development, its importance can also be generalized into the specific area of readiness for school which in itself may be considered as a part of the developmental process.

From Riessman's description of the disadvantaged one can conclude that the disadvantaged has an affective makeup which is significantly different from that of the middle-class; his needs, motivations, values, attitudes, and expectations are essentially different. The nature of his





affective makeup is essentially negative toward behaviours deemed important in the middle-class oriented school systems. The disharmony between his affective style and the specific expectations of the school produce an affective incongruence inhibiting his receptivity toward the contrived goals.

In order to help the disadvantaged, one has to begin by attempting to alter his affective orientation; the aim should be to develop a new affective makeup with positive orientation to the value system of the middle-class and its representative, the existing school system.

In conclusion, to increase readiness for school in the disadvantaged the approach should be developmental rather than compensatory; the initial aim should be the re-direction of his affective growth so that he may develop positive affect toward school and formal learning. With its re-development, affect should provide the "energetique" needed to the further development of, or the utilization of the desired cognitive structures.

According to Zigler and Butterfield (1968) the disadvantaged child suffers primarily from an emotional and motivational deficit (p. 12). The results of their recent



experimental study with disadvantaged nursery school children indicated that the alleviation of debilitating motivational factors, ie., affective re-direction and growth, was the most significant determinant which resulted in an increased intellectual performance (p. 12).

In the attempt to facilitate increased readiness for school in the disadvantaged child the key concept is the primacy of affect. The programs designed to facilitate readiness for school should essentially be re-developmental in nature, ie., to help the disadvantaged child alter his affective style to the acceptance of, and the appreciation of values and behaviours which at the beginning are incongruent to his own. If the primary importance of the affective change is disregarded the program will either not produce significant improvements in the disadvantaged child's readiness for school, or if improvements appear they will be temporary ones. It may also be possible that if a program is designed to facilitate affective re-development as the primary aim--as opposed to the cognitive one--the resulting affective change will remove the debilitating factors, allowing better utilization of the individual's existing



cognitive structures. This, in itself, could conceivably produce an increment in readiness for school comparable to that expected from the cognitive approach oriented compensatory program.



## CHAPTER III

### DEFINITIONS AND GENERAL HYPOTHESES

#### DEFINITIONS

For the purposes of this investigation, the following concepts will be employed, as defined here in operational terms.

1. Disadvantaged Child - is the member of a finite population and obtains an overall low rating on the criterion measure of Probability for Success in School.
2. Readiness for School - is a measure of the individual's affective and cognitive development. It is determined by the position of the individual's bivariate score on the scatter diagram and its position in relation to the cutting scores established a priori.





3. Affect
  - is a global term; refers to a large collection of dynamic factors responsible for the manifested behaviours which are measured by the Social Behaviour Scale.
4. Cognition
  - is the intellectual functions of the individual as measured by the Metropolitan Readiness Test.
5. Treatment I
  - refers to the "Readiness" or "cognitive" group, in which the subjects received primarily a treatment to facilitate intellectual growth.
6. Treatment II
  - refers to the "Playschool" or "Affective" group, in which the subjects received primarily a treatment to facilitate social-emotional growth.



## GENERAL HYPOTHESIS

The general hypothesis tested in this investigation was: that children who received the affective treatment will score as well on the Readiness for School criterion as those children who were given the cognitive treatment, ie., there will be no statistically significant differences between the performance of the two treatment groups on the Readiness for School criterion.



## CHAPTER IV

### REVIEW OF THE RELATED LITERATURE

#### ON READINESS FOR SCHOOL

One needs only to turn back the pages of history to see the importance placed on factors related to children's success in school. This interest has always been a constant and reflected the given time's philosophical concern and dominant notions about human development (Butler, 1959).

From the earliest times recorded one can read about Plato's concern with individual differences in education and the need for differential educational prescriptions. Quantillian (First Century A.D.) used, what we would call now, a holistic approach to the individual in the educational process and suggested that schools should develop the whole person and to consider the individual as a whole in the educative process.

Quite obviously, these two great thinkers of the ancient times were referring to readiness for school in the context different from that of the present study. The approach of this study is based upon the individual task relationship emphasizing the child's side of readiness, ie.,



the child has to be ready for the tasks, the expectations, the demands set up by the school. If he is able to fulfill the demands he is considered to be "ready for school"

(Brenner, 1957). The approach taken by Plato and Quantillian is that of "school readiness", ie., taking the term in its literal sense--the school's readiness for the child. This would mean that the school and the teacher would have to adjust to the needs of the pupil regardless of where the pupil stood in his progressive developmental maturation (Brenner and Tyler, 1957).

The making of such fine distinctions between these two terms often used interchangeably, is not merely a semantic play. It is a conscious attempt to illustrate the change that had taken place through history in the viewing of the child and school relationship. Initially, the onus was on the schools to accommodate; in time the child became the one who had to get ready for the expectations of the schools. It is only now that we see some attempts of re-alignment, first by critical evaluations of the present day student-school relationships (Leonard, 1968), and secondly by suggestions as to how the institution of education could regain the equilibrium by the adjustment of teachers,





approach and curriculums to the needs of the child (Holt, 1964, 1967).

Brenner (1957, 1958, 1959, 1962, 1964, 1965, 1966, 1967) and the members of his research team at the Merrill-Palmer Institute have been conducting an extensive research in the area of readiness for school. The aim of their research is to learn about the criteria, patterns and contents of readiness. Their extensive findings indicate that readiness for school, ie., the child to task concept is, and always had been a vague, ambiguous term, difficult to define. Readiness for school is a global concept, covering a great variety of factors. It is a complex term, multidimensional in its composition and cross-involvement. It also is dynamic and changing; its relative meaning depends on the style and concerns of any given time (Brenner, 1957).

Today we still do not have an adequate concept of readiness. We have no doubts about its importance; readiness for school is the basis for happiness in school and for good performance (Brenner, 1957). If a child is not ready for school the results may be various forms of person-



ality disturbances and frustrations (Johnston, 1951), as well as permanently depressed interests and motivations regarding school and related tasks (Thompson, 1952).

This is, of course, a holistic approach to Readiness for School. The historical review indicates that an approach somewhat similar to this existed in the Greco-Roman ages and was not utilized again until the advent of the dynamic psychology. In the meantime various approaches to readiness for school appeared and disappeared intermittently.

During the most primitive stages of industrialization readiness for school referred only to single-trait criteria which determined the given times' school admission policies (Brenner, 1957). Traits, such as physical size, ability to count, read or write, verbal facility, sociability, and chronological age often were determinants for school entrance. According to Kessen (1965), chronological age as criterion may have been the result of humanitarian concern (Cooper, 1842) in order to save children from exploitation through such means as working in mines and collieries. Curiously enough, chronological age as the criterion for school admission has remained with us.



Chronological age and other single-trait concepts convey the belief that one item in itself is considered to be adequate to determine readiness for school. Through the ages the inadequacy of this approach is as likely recognized and it was replaced by--what Brenner calls--"plural-trait concepts" in which two or more traits were combined in a mechanistic-additive fashion, eg., size, age, and reading ability. While this approach to readiness for school was a more advanced one, it still failed to consider anything but the criterion for school admission policies and failed to consider the person as a whole.

The plural-trait concept of readiness with the advances in the study of human development was quickly expanded and generalized during the early part of the eighteenth century. Philosophers were considering the child as a whole in the educational process. While readiness for school was seen as an integral part of the child's development, the individual attitudes taken in the heredity versus environment controversy decided the respective approaches to readiness as well. Those who claimed that readiness is a matter of unfolding growth of the child's genetic





endowment were--amongst others--Rousseau (1712-1778), Pestalozzi (1746-1827), and Spencer (1820-1903). In Rousseau's "Emile" one can see a plan to educate the child in accordance with the "smooth flowing rhythms of nature which would allow him to mature gradually...." (p. 18). For Pestalozzi "the child is a real, living, spontaneous force which acts organically on its own development" (p. 27). According to Spencer the child develops according to his natural rhythms and the learning experiences should be in harmony with, and attuned to those natural rhythms (p. 22).

Those who claim that readiness is largely a result of environment, education, and teaching methods, in other words "environmentalists", are of more recent origin and represented by such names as Watson (1919), Vigotsky (1963), Bruner, J. (1960). Vigotsky's "zone of potential development" is where a child can perform with adult guidance and help regardless of his mental age. To Vigotsky teaching should precede development, and the child's learning evokes a whole number of processes of development which could not take place without learning (p. 32). Bruner, in supporting Vigotsky stated that "Any subject can be taught effectively





in some intellectually honest form to any child at any shape of development" (p. 33).

The conclusion one can draw from this nature versus nurture based controversy is that neither one of these views alone can do justice to the child as a whole; only a holistic or global approach can provide a solution to such a complex problem as development and readiness for school. It is also apparent that the significance of experience for all kinds of behaviour and functioning can not be denied. One can not think of readiness or maturation as something that will come via spontaneous unfolding of potentials. Certain inputs, leading to critical experiences are required for growth.

With the advent of scientific research to human behaviour the study of singular traits in readiness for school returned again. However, this single trait approach studied special traits and some were found to be of practical value in school. An example to be cited is the most resistant single special trait, reading readiness, which has remained with us since Pestalozzi.

Its importance in education is obvious; it is a



fundamental variable in readiness for school (Gates, 1941; Olson, 1953; Durrell, 1955, 1961; Smith and Dechant, 1961; Jackall, 1961) and many educators even consider reading readiness to be the representative of, or readiness for school in itself (Gates, 1941; Bradley, 1956; Durrell, 1955, 1961; Jackall, 1961; Natale, 1959).

Other special single-trait concepts utilized as indicators of readiness for school were and still are mental age, intelligence quotient, perceptual ability, ability to discriminate gestalten and numerous other traits as well (Morse, 1956; Engel and Baker, 1956; Ralph, 1960; Koppitz, 1961). Readiness for school studies of this nature usually start out with an operational hypothesis, using a well defined independent variable to be tested as a measure of readiness for school. For Ralph (1961) and Luttgen (1962) perception and conception are indicators of readiness for school; for Koppitz (1961) and Ralph (1960) it is the child's ability to reproduce gestalten that determines the degree of readiness.

These single-trait, and later the uni-dimensional studies--although of limited value per se--do contribute



significantly to the overall understanding of what constitutes readiness for school. A shortcoming of this type of approach, however, is that it either does not include the concept of the whole child in the process (Brenner, 1957), or the significance of other variables is ignored or simply rejected. Durrell (1956), in discussing several concepts of reading readiness had simply rejected the notion that emotional and personality adjustment may be of significance (pp. 46-48). In his Manual for Analysis of Reading Difficulty (1955) he further re-stated his belief that:

Emotional problems of children are usually the result of failure, rather than its cause. An effective remedial program which enlists the vigorous effort of the child and produces specific progress which he can see is often the most effective psychological therapy for the child (p. 2).

Ausubel (1964), in dealing with the question of readiness for school also rejected the significance of the personality aspects and social background, and stated that a disadvantaged child is not "ready" because of deficient intellectual endowment (p. 318). Hunt (1964) had also taken a similar viewpoint, while Riessman (1964) stated that there has been much too much emphasis on the emotional approach in attempting to understand why the child doesn't learn (p. 328).





He further suggests that

....even where his (ie., the disadvantaged child's) difficulties are, in part, emotional or due to conflict, it still may be possible to ignore this particular focus, and concentrate on the specific expression of the difficulty itself, namely, his learning pattern (p. 328).

It appears that such attitudes are not only the result of specific scientific orientation, but also a reaction to "the obsession that many psychologists have shown until recently with the emotional development of the child" (Pines, 1967). However, one cannot deny the impact of social and emotional factors on readiness and on the learning process in general. According to Hofman "any phenomenon of life which involves the totality of the person to this extent must of necessity be complex in nature and its processes, therefore, cannot be adequately described with a simple formula" (p. 95).

Any change in behaviour affects the total person, or to use Olson's phrase "the whole child is learning". It is precisely for this reason that emotional and social factors have an impact and a bearing on the learning process. For those who like to disregard such ideas as modern slogans a statement by Plato through the mouth of Charmides may





illustrate the need of viewing the individual as a whole:

This is the greatest mistake in the treatment of disease that there are doctors for the body and doctors for the soul when neither one can be separated from the other. But this is precisely what Greek doctors overlook and this is why so many diseases escape them. In short, they never see the whole. But it is the whole which should command their attention, for if the whole is sick it is impossible for any of the parts to be healthy (p. 96).

A research project to study Readiness for School at the Merrill-Palmer Institute (1953) considered the total person. Essentially, their approach was a holistic one with features of the "Field-theory" incorporated in it.

The child not only is seen as an integrated or less integrated whole in which some special features may be dominant, but also as living always in a field of forces in which growth occurs through constant interaction between native endowment and such forces as the child's family, his physical environment, his community, church, teacher, classmates, school, culture and subculture (p. 119).

Society's concern over the plight of the disadvantaged had brought about the U. S. Federal Program of "Project Head Start" in an attempt to ameliorate some of their problems through education. For a long time it was obvious that the disadvantaged child is not ready for school, cannot learn, nor can he achieve as well as his middle-class counterpart. Aside from this he often is not happy in



school and cannot utilize the opportunities.

The prominent approach to the compensatory programs is of cognitive orientation; however, more recent reviews of the results indicate that the programs are not producing much positive results (Harper's Magazine, 1967; Journal of School Psychology, 1966). Because of the negative attitude of some prominent educators toward the inclusion of the emotional aspects into the compensatory programs, they are searching for reasons for failure in the teaching methods applied (Goldberg, 1966; Jensen, 1966; Dobbin, 1966). Recently, however, the results of a good number of studies indicated that the emotional and social factors are of great importance in attempting to improve readiness for school in the disadvantaged (Zigler, 1963; Stevenson and Fahel, 1961; Pederson, 1968; Zigler and Butterfield, 1968).



## THE DISADVANTAGED AND READINESS FOR SCHOOL

The present trend in the study of readiness for school considers the social and emotional dimension as a significant criterion contributing to the overall readiness of the child for school. However, its function is not being investigated because the basic approach still is either exclusively behaviouristic or cognitive in orientation. The consequence of this is that while paying lip-service to the importance of the social and emotional factors, most readiness programs, including the project Head Start, are designed to facilitate cognitive development, almost exclusively. Obviously, almost any specialized intensive training is likely to lead to some degree of higher development in the areas in question, however, it may very well be that by this process even the one aspect of readiness for school will be developed only temporarily. Changes in the social-emotional makeup of the disadvantaged are essential to achieve not only success, but also happiness in his school endeavours. The social-emotional makeup, or as Izard and Tomkins (1965) call it the "affect", and





cognition are generally thought of as interrelated aspects of the total personality; however, in the case of the disadvantaged, fundamental affective changes appear to be essential for an overall improved readiness for school learning.

To a degree the disadvantaged child's demonstrated unreadiness for school--in spite of the compensatory attempts--may be the consequence of the kind of approach taken by educators in attempting to view the "deficiencies" they contrive to remedy. They often disregard the possibility of the interrelatedness of "deficiencies" with the nature of the psychological makeup of the disadvantaged. To define the problem of the disadvantaged child in isolation without considering his uniquely different personality may constitute a one-shot fallacy responsible for the lack of success shown by the various compensatory programs. The term "disadvantaged" is replacing the catchword "cultural deprivation", which has proved to be a shibboleth, in order to eliminate even the suggestion that those to whom the term is implied are inferior beings (Mackler, 1967). Disadvantaged" is also a good term to use in an operational





definition; "disadvantaged in terms of" is the usual beginning. However, it may not be sufficient to state only that the disadvantaged is different from the middle-class child in terms of lacking in formal language, availability of books, education facilities (Riessman, 1962), has a lower level cognitive development and an inadequate learning approach (Scott, 1967).

Possibly the disadvantaged child should not be viewed as "disadvantaged in terms of", rather he should be recognized as culturally or sub-culturally different from that of the middle-class with different value systems, attitudes and goals (La Brant, 1957). He possesses a "Leitmotiv", or a central theme of life, different from that of the middle-class child because of differential development of the personality. This likely is the result of the specific influences made upon him by the immediate family, his neighborhood, peers, and the field of other forces from his environment. The constant interaction and transaction between the disadvantaged child and his physical, intellectual, emotional, social, economic and cultural environment produces his specific life experiences and unique pattern



of development (Brenner, 1957).

These notions, of course, are generally accepted. The problem is that in devising programs--to help the disadvantaged child to succeed in school--its significance is often overlooked.

It is assumed....that failure in school is caused by a variety of factors in a child's environment. Our concern is not with the question of whether disadvantaged social and cultural conditions produce school failure. We wish, instead, to direct our study to the kind of communication which takes place between the individual and his environment (Bishop, 1967).

Unilateral approaches treat overt symptoms instead of causes; an uni-dimensional cognitive approach to readiness for school attempts to "compensate" or make up for that in which the disadvantaged child is deficient; ie., cognitive development and learning to learn in school. However, approaches such as this produce little if any improvements in the disadvantaged child's readiness for school (Goldberg, 1966). If they produce better results they are temporary only, or short-term improvements. The "progressive achievement decrement (PAD)" (Jensen, 1966) or cumulative deficit becomes measurable and observable after the first year of schooling regardless of the fact that a child initially was



enrolled in a compensatory program (Jensen, 1966). Intelligence quotient drops, achievement is reduced, and the dropout problem remains very significant (Goldberg, Jensen, 1966) once the child completes his first year.

In order to produce lasting or "permanent readiness for school" (Brenner, 1957), study and research of the personality of the disadvantaged will be necessary. The term personality is used here in a global sense; it refers to the dynamic aspects of the individual's total makeup, to the affective domain with its variables and also the forces responsible for its specific development. The study of the influence of factors responsible for development is also crucial; readiness for school, especially in the case of the disadvantaged child, is not only a child-school phenomenon. There "also are the problems of the readiness of parents, of teachers, and of peers that greatly influence the child's readiness, happiness and successful performance in school...." (Brenner, 1957)

Riessman (1962), in describing the portrait of the underprivileged, essentially describes the prototype of the disadvantaged. The psychological makeup he describes is





strikingly different in several ways from that of the middle-class individual. The key factors are intense feelings, emotions, a good measure of psychological rigidity, definiteness of convictions, present orientedness and generalized pragmatism. The disadvantaged also is anti-intellectual and this trait is rooted deep in a number of his valued beliefs and attitudes. He views talk, reading, intellectualism as well as extended school learning as negative phenomena and while he may recognize the usefulness of schooling, he intends to utilize it only as a means to an end (Sexton, 1961).

All or most of these traits are part of the disadvantaged individual's emotional makeup, leading ultimately to the development of his unique personality. This is his affective domain, the dynamic aspects of his personality, about which one makes inferences through the observation of his manifest behaviours.

While Riessman's notions may not be accepted by all, it also is apparent that his analysis of the psychological makeup of the disadvantaged has not been invalidated. Consequently, one may consider his portrayal of the disadvan-





taged to be of value and he likely is describing the disadvantaged person's affective-motivational-attitudinal variables described jointly in this study as the affective domain.

A personality makeup such as described above obviously is different from the one schools expect children to have upon entering grade one. It also is obvious that such affective makeup should have significant influence on the child's readiness for school. During the last few years several research projects were aimed at investigating the significance of the affective makeup in readiness for school (Berkowitz, Butterfield, and Zigler, 1965; McCoy and Zigler, 1965; Alpern, 1966; Zigler and Butterfield, 1968). The findings in general tend to indicate that the affective domain is of considerable importance, in fact, they suggest that it is the emotional and motivational deficit which decreases intellectual performance of the disadvantaged child (Zigler, Butterfield, 1968). Applying their findings to the preschool programs for the disadvantaged they state:

The findings indicate that the deprived child suffers from an emotional and motivational deficit which decreases his usual intellectual performance to a lower



level than we would expect from his intellectual potential as measured in an optimizing test situation. In trying to improve the deprived child's general level of performance, it would appear at least as important to attempt to correct his motivational inadequacies by developing nursery programs geared specifically toward changing his adverse motivational patterns as it is to concentrate on teaching cognitive skills and factual knowledge (p. 12).



## CHAPTER V

### EXPERIMENTAL DESIGN

#### THE SAMPLE

In the fall of 1967 two hundred and fifty, five-year-old children were selected randomly from a pre-designated area of Edmonton City, representing the disadvantaged segment of the population at large. The Edmonton City census records were used for the selection. An initial screening procedure which employed the "Child and Family Questionnaire" (Appendix A) reduced the sample size to approximately one hundred and twenty children. The questionnaire was designed to screen out children with incapacitating physical disabilities and it also examined the family's socio-economic status; families with over \$7000.00 annual income, with dwellings which had two more rooms than the number of occupants, and if the parents achieved better than high school education were excluded from the sample (Bishop, 1967).

By employing an additional control the sample size was further reduced to ninety children, all of whom were considered to be eligible for the program. This control was





the additional screening on the basis of the hypothesis of low probability for success in school. All ninety children were examined and observed in interaction with their parent(s), based upon the tri-dimensional approach of the hypothesis. Eligibility for the program was determined by the utilization of clinical judgments and examination results of the specially trained assessment teams. The team was made up of two pre-school teachers, a speech therapist, three school psychologists, a pediatrician and a health nurse to assess the probability for success in school within their special areas. The health team was to further ascertain that no incapacitating neurological or physical disabilities were present in those children who were recommended for the program. The other members of the team were examining the individual children and in interaction with their parents and peers for additional signs of low probability for success in school. According to Bishop (1967), a child with low probability for success in school would have--aside from material deprivation--

low level verbal skills, a tendency to deal concretely rather than abstractly with objects and events, an



immediate rather than future time orientation, limited contacts with people and things outside the family setting, a tendency to see adults as controlling authorities rather than agents for learning, and the child would likely perceive learning as a conforming process rather than a discovering one (p. 5).



## LOW PROBABILITY FOR SUCCESS IN SCHOOL

Bishop (1967) described a selection procedure to identify low learning potentials. In his Preschool Demonstration Project this procedure was utilized to determine children's eligibility for the preschool programs on the basis of low probability for success in school.

Three dimensions of the child's development were considered as the crucial ones in this procedure. The diagram below represents the manner in which these three dimensions were to identify and evaluate a given child's probability for success in school.

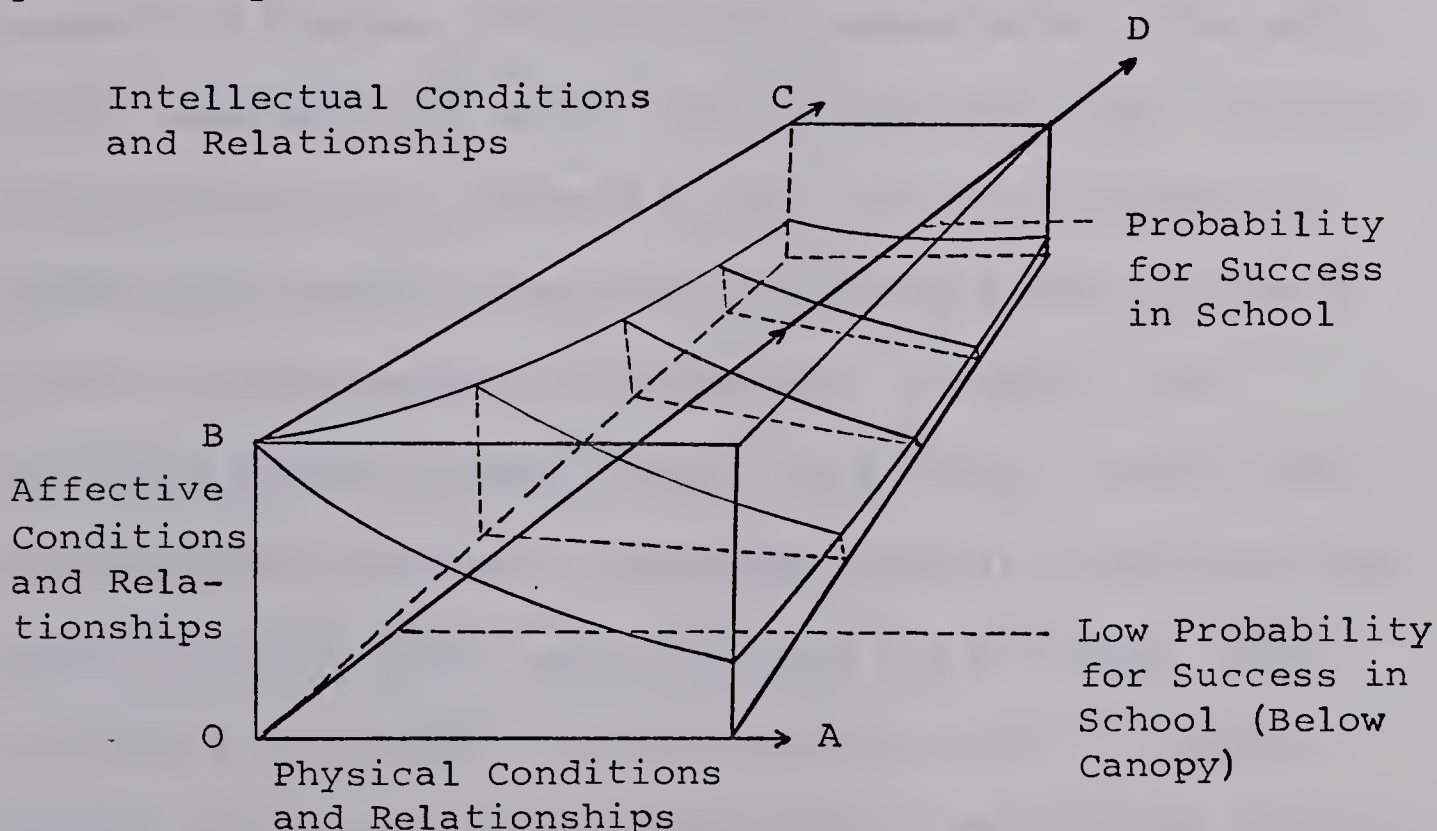


FIGURE 1: Tri-dimensional model for the assessment of probability for success in school.



Each axis on the diagram represents a vector of conditions and relationships in each of the three areas. The vectors run from point O to points A, B, and C. The child's probability for success is recorded along vector O-D. Position on this vector reflects the child's measured standing along the three axes, A-A, O-B, and O-C. The tent-like canopy, which is a surface taken from Lashley (1929), provides representation of varying probabilities, depending on the status of the child's conditions along the three axes. According to the model an exceptionally bright child could still have a low potential for success in school provided physical and affective conditions were rated low. Hence, any point below the canopy would reflect low potential and non low potential would be indicated above (Bishop, 1967).

The selection procedure utilizing this three dimensional approach employed both objective measures and clinical evaluations to determine the level of development of the respective domains. The objective measures were the pediatric examination of each child, structured parent interview and questionnaires, Peabody Picture Vocabulary Tests and speech and language assessment to evaluate the children's level of development in the physical, affective, and cognitive domains respectively. In addition, three school psychologists--trained to evaluate physical, affective, and cognitive functioning--also observed the children. They utilized a five point scale ranging from low (1) to the optimal (5) to code their evaluations. The results of all





of the assessments were used in evaluating the children's learning potentials and their availability for the program.

The assessment results indicated that on the average the children in the sample possessed low learning potentials and low probability for success in school. Since the results of the pediatric, speech and language examinations are not expressed in numerical terms, it was decided to illustrate the children's probability for success in school in terms of their scores on the respective five point scales.

TABLE I  
PROBABILITY FOR SUCCESS IN SCHOOL:  
SUBJECTIVE EVALUATIONS  
(GROUP MEANS AND STANDARD DEVIATIONS  
OF OBTAINED SCORES)

Group	N	EVALUATIONS					
		Intellectual		Emotional		Physical	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Treatment I	22	2.13	0.31	2.32	0.42	2.47	.51
Treatment II	21	2.02	0.34	2.20	0.39	2.52	.44

The differences between the group means are not significant. (The respective probabilities are  $> .20$ .)



## DESCRIPTION OF PROGRAMS

Essentially, both experimental programs had dual purposes; both contrived to enhance the children's cognitive and affective development, however, they both had different primary aims.

The "Readiness" program, "cognitive" or "Treatment I", aimed primarily at intellectual development. Consequently, the emphasis was on providing specific structures to facilitate growth in

- a) alphabet recognition
- b) vocabulary development and verbal skills
- c) number concepts
- d) letter and word recognition
- e) science-oriented discovery and exploring
- f) shape and color recognition.

Included also as primary aims were the fostering of creative expressions, dramatic enactment and listening to stories about music and literature.

The establishing of good manners, respect for views of others, development of tidiness, orderliness, and cleanliness, the feeling of responsibility and development of social sharing were also emphasized.

The activities of the "Readiness" program were conducted primarily by a teacher and specially trained



volunteer workers.

The "Playschool", "Affective", or "Treatment II", on the other hand, attempted to prepare the child for life (Bishop, 1967). The preparation principally was "social" in nature, with a primary aim toward the development of the social and emotional traits in the children. The program contrived to develop the children's

- a) self-confidence
- b) need to belong to the group and group acceptance
- c) ability to share and live compatibly with others
- d) need to work and play with others
- e) feelings of adequacy
- f) self-respect
- g) independence
- h) responsibility and selective expression and control of their own emotions and feelings
- i) respect for others; peers or adults
- j) sympathy and tolerance toward others
- k) perception of feelings and emotions of others.

(Playschool outline, 1967,  
Kindergarten, 1967)

Secondary aims were the development of motivation and favorable attitudes to learn and achieve. This objective was approached by pragmatic means (Riessman, I., 1961), ie., through the utilization of familiar materials, items of interest in the homes. An additional factor of significance was that the children were given free choice to initiate discussions on subjects of specific interest to





them, through which their curiosity and enthusiasm were aroused and generalized to learn about the world of ideas.

The over-all approach of the playschool program is seen as a useful way of facilitating directional changes in the disadvantaged child's affective development. It brings about development of positive affective set (Tomkins, 1967) for formal school learning.

The playschool program was designed to facilitate parent and child interaction as well. The design called for helping the mothers and children to adapt to their vis-a-vis emancipation as well as providing the children with the necessary positive reinforcements for their newly acquired affective traits and learning skills. The involvement of the significant adults may also have facilitated the foundations for the vertical or even the horizontal diffusion of affective stimulation deemed necessary to retain the child's newly gained affective style (Miller, 1967; Hess, R. D. and Shipman, V., 1965).



## THE PSYCHOLOGICAL INSTRUMENTS

A. Cognitive MeasureThe Metropolitan Readiness Tests - Revised Edition.

The Forms A and B of this instrument measure the extent to which children have developed in several of the intellectual skills and abilities that contribute to readiness for school. They provide six regular and one optional tests, two of which are time tests. The six regular tests sample the development of factors considered important components of first-grade intellectual readiness. According to Hildreth, et al. (1965) these include:

- a) comprehension and use of oral language and richness of verbal concepts
- b) visual perception and discrimination
- c) auditory discrimination
- d) general ability or capacity to infer and to reason
- e) knowledge of numerical and quantitative relationships
- f) sensory-motor abilities (p. 11).

An inspection of the alternate forms A and B revealed that Form-A contains several items which are relevant almost exclusively in the United States, therefore, it was decided to use Form-B only.



The Metropolitan Readiness Test is regarded as a robust test; it provides the examiner with a good measure of the individual's intellectual development and functioning. It also is a good diagnostic instrument because it provides the teacher with a picture of the child's strengths and weaknesses in intellectual development. The overall total score may be used for classification; it has percentile ranks, stanine scales, and letter ratings with readiness status indicated by adjectives and brief verbal descriptions of each level.

Odd-even reliability coefficients are reported in the Manual (Hildreth, et al. 1965). Although the reliabilities of some sub-tests are low, ranging from .33 to .89, this may well be due to the relative shortness of some of the sub-tests. The reliability of the total score is reported to be ranging from .91 to .94 (Corrected by the Spearman-Brown formula).

Content validity is shown by inter-correlations between the sub-tests. They all are positive and highly significant. Congruent validity measures indicate high correlations with the Murphy-Durrell Readiness Analysis Test, and the Pintner-





Cunningham Primary Mental Ability Test. The Metropolitan Readiness Tests also have good predictive validity; a median correlation coefficient of .65 was obtained when the results were correlated with those of the Metropolitan Achievement Test, Primary I obtained after the completion of grade one.

#### B. Affective Measure

The Metropolitan Readiness Tests do not include the measurement of any distinctly social or emotional factor. The reason for this is that the testing of such variables is beyond the scope of paper and pencil tests (Hildreth, et al. 1965). In the search for a suitable instrument the age of the children, ie., their pre-literate status, reduced the selection to a choice between the various projective techniques and rating scales (Anastasi, 1967).

#### Social Behaviour Scale (Stott, L. H., 1959)

This rating scale was selected to measure the status of the pre-school children's affective development. Originally, the scale was constructed to appraise "personality" through characteristic behavioural manifestations (Stott, L.,





1962). For the purposes of this study the scale was researched and the social-behavioural manifestations it measures were found to be of crucial importance in readiness for school in the context of the definition offered (Tari, 1968). With the permission of the Merrill-Palmer Institute representing Dr. Stott, the Social Behaviour Scale was employed to assess the developmental status of the affective factors by means of observing its behavioural manifestations in the children.

The present form of the Social Behaviour Scale measures seven behavioural factors on a continuum from their primitive manifestations to the mature, socially desired ones. The behaviour variables--on their positive ends--are labelled as:

- 1) Personal Responsibility
- 2) Leadership
- 3) Personal Security
- 4) Co-operation and Social Adaptability
- 5) Spontaneous Friendliness
- 6) Kindliness
- 7) Self Reliance (Stott, L., 1962).

Recently completed research at the Merrill-Palmer Institute provided up-to-date norms, tables to facilitate conversion of raw scores to standard scores and individual



profiles to identify strengths and weaknesses in the child's social behaviour (M.P.I. 1967).

Reliability measures on test-retest procedure were obtained ranging from .44 to .83 (Kuder-Richardson formula). All the correlations were statistically significant (Stott, 1959, 1962).

There are no reports on the validity of this scale. The present writer attempted to establish concurrent validity by matching the measured traits with behavioural factors of crucial importance for success in grade one. Representatives of the Edmonton City Public School Board and several grade one teachers (1968) identified the following behaviours as crucial for children entering grade one:

- a) willingness to follow direction
- b) acceptance of responsibility
- c) independence and confidence
- d) emotional control
- e) conformity to routine
- f) co-operation with contemporaries (Blatz, 1935).

These variables are almost identical to the ones measured by the Social Behaviour Scale. (See S.B.S. Profile, Appendix B)



Its construct validity has also been studied. "With an increase toward the maximum on the index of coding reliability highly significant correlations were found between the S.B.S. and the California Test of Personality, Primary" (Tari, 1968). Since the California Test of Personality, Primary is a widely used measure in readiness for school, (Edmiston R. and Peyton, 1950; Perry and Janet, 1960) the obtained correlations are considered as validity measures for the Social Behaviour Scale.





## OPERATIONAL HYPOTHESES

To test the general hypothesis the following operational hypotheses were introduced:

A. Cognitive Measure

- 1) The administered Metropolitan Readiness Test will reveal significant differences between the mean scores of the two treatment groups.

B. Affective Measure

- 2) The administered Social Behaviour Scale will reveal significant differences between the mean scores of the two treatment groups.

C. General: (Testing the degree of relation between the two measures for each treatment.)

- 3) The product-moment correlation coefficient will reveal a significant degree of relation between the cognitive and affective variables for Treatment I.
- 4) The product-moment correlation coefficient will indicate a significant degree of relation between the cognitive and affective variables for Treatment II.



- 5) There will be no significant differences between the results of the two treatment groups on the criterion measure of Readiness for School.



## EXPERIMENTAL PROCEDURE

The entire sample of forty-three children was given the Metropolitan Readiness Test, Form B, during the final days of their respective programs. The test was administered in group settings--up to four children in a group--by three different school psychologists. The final scoring was done by the present writer. The scoring was carried out according to the instructions outlined in the Manual. Both the raw scores and the percentile ranks were utilized in the statistical analysis.

The Social Behaviour Scale initially was given to the respective parents to fill out. However, after the first returns it became obvious that a gross systematic bias was involved in the parents' judgment. Following it was decided to utilize the judgments of the respective group leaders. The hypothesis behind this decision was that--keeping in mind their respective biases--they would likely evaluate the children's behaviours more objectively than the parents would. To check the reliability of their codings, or the magnitude of the possible error in their respective judgments, an independent coder was designated to make indepen-



dent judgments based on the same data. This finding was correlated with those of the two group leaders by which a measure of objectivity of the judges was obtained. Objectivity of judgments may operationally be defined as a reliability of the codings of the designated judges (Robinson, 1957).





TABLE II  
RELIABILITY OF CODERS

Treatment I.

X = scores made by the group leader.  
Y = scores by the independent coder.

Subject	X	Y
1	78	74
2	63	62
3	59	58
4	97	94
5	70	68
6	98	98
7	96	95
8	60	58

$$r = \frac{(X - \bar{X})(Y - \bar{Y})}{(X - \bar{X})^2 (Y - \bar{Y})^2} \quad \text{Ferguson, 1959 (7.2)}$$

$$r = .9971$$

$$t = r \frac{N - 2}{1 - r^2} \quad \text{Ferguson, 1959, (12.10)}$$

$$t = 32.15 \quad p .001$$



TABLE III  
RELIABILITY OF CODERS

Treatment II.

X = scores made by the group leader.  
Y = scores by the independent coder.

Subject	X	Y
1	70	68
2	87	86
3	91	86
4	106	104
5	78	77
6	79	77
7	82	81
8	81	79

$r = .9927$

$t = 20.24$        $p .001$



## CHAPTER VI

### RESULTS AND INTERPRETATIONS

Tables IV and V show the means and standard deviations of the administered Metropolitan Readiness Tests and the Social Behaviour Scales for each of the two treatment groups in raw score forms.

TABLE IV

ARITHMETIC MEANS AND STANDARD DEVIATIONS  
OF THE METROPOLITAN READINESS TESTS  
(Raw Scores)

Group	N	Mean	S.D.
Treatment I	22	44.591	15.616
Treatment II	21	41.666	16.487

TABLE V

ARITHMETIC MEANS AND STANDARD DEVIATIONS  
OF THE SOCIAL BEHAVIOUR SCALE  
(Raw Scores)

Group	N	Mean	S.D.
Treatment I	22	80.227	15.991
Treatment II	21	92.809	15.123





To test the significance of differences between the results received by the members of both treatment groups on the two measures, the single factor analysis of variance method was employed (Ferguson, 1966). The respective null hypotheses stated that there are no differences between the group means, ie.,

$$H_0: \mu_i = \mu_{ii}$$

Significance level:  $\alpha = .01$

TABLE VI

ANALYSIS OF VARIANCE; ONE-WAY CLASSIFICATION  
OF M.R.T. SCORES OBTAINED BY THE MEMBERS  
OF THE TWO TREATMENT GROUPS

Source	S.S.	M.S.	D.F.	F.	P.
Treatment	91.894	91.894	1	0.340	0.562
Within	11074.043	270.098	41		

Decision: Since the probability is 0.562 the null hypothesis cannot be rejected.

The result indicates that there are no significant differences among the M.R.T. scores for the two groups. The results could have been obtained five to six out of ten times by chance alone.



TABLE VII

ANALYSIS OF VARIANCE; ONE-WAY CLASSIFICATION  
OF S.B.S. SCORES OBTAINED BY THE MEMBERS  
OF THE TWO TREATMENT GROUPS

Source	S.S.	M.S.	D.F.	F.	P.
Treatment	1700.875	1700.875	1	6.687	0.013
Within	10429.250	254.371	41		

Decision: Since the probability is .01 the null hypothesis is rejected and we accept the alternate hypothesis stating that the group means are not equal, ie.,

$$H_1: \mu_I \neq \mu_{II}$$

To test the degree of relation between the obtained scores on the two measures for each treatment group the Pearson-product-moment correlation coefficient was employed (Ferguson, 1966). For treatment group I the correlation between the paired observations for all members was  $r = .371$ , the  $t = 1.77$ ,  $p .10$ , not significant. For treatment group II the correlation between the paired observations for all members was  $r = .67$  and the  $t = 4.36$ ,  $p .001$ , highly significant.

To illustrate how the members of the two treatment



groups performed on the criterion measure of Readiness for School, first an overall correlation coefficient was computed including all members of the two groups. The Pearson product moment  $r$  was  $= .485$ ,  $t = 3.55$ ,  $p = .001$ . Following each paired measurements were plotted on a scatter diagram and cutting scores were established for both measures according to the criteria provided by the respective Manuals (Hildreth, 1966; Stott, 1962; Tari, 1968). According to Hildreth a child with average or above average readiness status scores 45 points or above (raw score) on the Metropolitan Readiness Tests. Individuals with scores of 24 to 44 have "low normal" readiness status, but still have a chance to succeed if special help is provided. On the Social Behaviour Scale a child has to obtain at least an average score, or 75 points (Raw Score form), for social-emotional maturity equal to the five to six years' age level. Individuals whose scores are between the mean and  $-.5$  standard deviation, ie., 59 to 75 points range, function in the five to five and a half year level of social-emotional maturity, and may be considered as having "low-normal" status for school readiness (Tari, 1968).



According to this criterion in group I there are nine, while in group II eight children with average or above average readiness for school status. The two groups have the same number of children with low average status (eight children in each group) and four children in each group with low readiness for school status. The application of the test of significance between two independent proportions indicated that there are no differences between the obtained proportions ( $z = 1.103$ ;  $p > .20$ , not significant).

Tables VIII and IX illustrate the distribution of the two groups' bivariate scores on the Metropolitan Readiness Test and Social Behaviour Scales, and Table X illustrates the plotted scores on a scatter diagram.





TABLE VIII

DISTRIBUTION OF BIVARIATE SCORES FOR TREATMENT I  
 X = COGNITIVE (M.R.T.) VARIABLE  
 Y = AFFECTIVE (S.B.S.) VARIABLE

Members	"Measurement"	
	X	Y
1	12	91
2	21	59
3	22	78
4	28	62
5	32	91
6	35	94
7	39	60
8	39	72
9	40	64
10	43	53
11	46	61
12	46	98
13	50	63
14	51	70
15	52	95
16	52	98



TABLE VIII

DISTRIBUTION OF BIVARIATE SCORES FOR TREATMENT I  
X = COGNITIVE (M.R.T.) VARIABLE  
Y = AFFECTIVE (S.B.S.) VARIABLE  
(Continued)

Members	"Measurement"	
	X	Y
17	53	103
18	54	77
19	57	92
20	61	91
21	66	96
22	82	97



TABLE IX

DISTRIBUTION OF BIVARIATE SCORES FOR TREATMENT II  
 X = COGNITIVE (M.R.T.) VARIABLE  
 Y = AFFECTIVE (S.B.S.) VARIABLE

Members	"Measurement"	
	X	Y
1	14	79
2	19	70
3	19	79
4	22	83
5	27	99
6	29	113
7	32	87
8	35	78
9	35	81
10	38	86
11	41	82
12	43	80
13	44	91
14	46	87
15	55	80
16	57	121





TABLE IX

DISTRIBUTION OF BIVARIATE SCORES FOR TREATMENT II  
X = COGNITIVE (M.R.T.) VARIABLE  
Y = AFFECTIVE (S.B.S.) VARIABLE  
(Continued)

Members	"Measurement"	
	X	Y
17	60	106
18	61	115
19	62	113
20	66	107
21	70	112



TABLE X

SCATTER DIAGRAM: BIVARIATE FREQUENCY DISTRIBUTION  
OF SCORES OBTAINED ON THE M.R.T. AND S.B.S.

X (Social Behaviour Scale Scores)

50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100-104	105-109	110-114	115-119	120-124	125-130	
									1							85-89
																80-84
																75-79
												2				70-74
									1		2					65-69
								1			2	2	2			60-64
						2		1						2		55-59
		1		1	1				11	1						50-54
		1					2		1							45-49
1		1				22		2								40-44
		1		1	2	2	2	1								35-39
							2	1								30-34
		1							2			2				25-29
	1				1	2										20-24
				2	2											15-19
					2			1								10-14

Y (Metropolitan Readiness Test Scores)



## COGNITIVE MEASURE

Hypothesis A 1) The administered Metropolitan Readiness Test will reveal significant differences between the mean scores of the two treatment groups.

This hypothesis was not supported (Table VI).

## AFFECTIVE MEASURE

Hypothesis B 2) The administered Social Behaviour Scale will reveal significant differences between the mean scores of the two treatment groups.

This hypothesis was supported by the data (Table VII).

## GENERAL

(Testing the degree of relationship between the two measures for each treatment.)

Hypothesis C 3) The product-moment correlation coefficient will reveal significant degree of relation between the cognitive and



affective variables for Treatment I.

This hypothesis was not supported by the data.

Hypothesis C 4) The product-moment correlation coefficient will reveal significant degree of relation between the cognitive and affective variables for Treatment II.

This hypothesis was supported by the data.

Hypothesis C 5) There will be no significant differences between the results of the two treatment groups on the criterion measure of Readiness for School.

The data supported this hypothesis.





## CHAPTER VII

### DISCUSSION AND IMPLICATIONS

A fundamental aim of this study was to measure the overall effectiveness of the two compensatory programs and to compare their effectiveness in improving the readiness status of the disadvantaged children in the sample. The general hypothesis stated that the children who received the "affective" treatment would score as well on the Readiness for School criterion as those children who were given "cognitive" treatment, ie., there would be no statistically significant differences between the performance of the two groups on the criterion measure. The results supported this hypothesis indicating that, in this case, the difference in treatment approach was not a crucial variable in producing the achieved results on the criterion measure.

The criterion measure of Readiness for School as applied in the statistical treatment is, of course, a measure of the individual children's readiness for grade one work. In a sense, it is a measure of the temporary aspects of Readiness for School (Brenner, 1957) and on this the mean scores of the two groups are not significantly



different. However, in line with the theoretical orientation of the present study, we also are interested in the long term effects the respective approaches may have produced in the children's receptiveness toward differential values, style of life, attitudes, etc...ie., the development of positive affective style toward the middle-class values. At the present time one cannot measure anything but the temporary effects; however, since the "Preschool Demonstration Project" is a longitudinal one (Bishop, 1967), it provides an opportunity to follow the children's progress up to June, 1979, or to the end of grade XII.

While the testing of the major hypothesis indicated no differences in Readiness for School status, the results provided some interesting findings in the process of testing the minor hypotheses. In a sense, the minor hypotheses were designed to measure the processes by which the respective groups obtained the products, ie., the overall status on Readiness for School. The minor hypotheses were formulated to measure the effectiveness of the two programs in eliciting growth in the cognitive and affective spheres in accordance with the specific aims of the programs. The



data revealed that Treatment I--which had the primary aim to facilitate intellectual development--did not produce a significantly higher mean score, although an increase in this aspect with directionality was expected. On the other hand, the affective or "Playschool" group while producing a cognitive mean score comparable to that of Treatment I, was successful in facilitating increased social-emotional growth in accordance with the stated aim. In addition, the bivariate scores of the "affective" group had a correlation coefficient of  $r = .67$  which was found to be significant at the .001 level of confidence. The bivariate scores of the "cognitive" group, on the other hand, had an  $r$  of .37, not statistically significant ( $p = .10$ ).

The possible implications of these findings may be of some significance regarding the prevalent approach in compensatory education. The results may imply that a compensatory program with cognitive orientation is not more effective in producing a better state of readiness for school than any other approach. It is not a superior method even to produce temporary improvement, nor is it necessarily successful in achieving the contrived aims. The Playschool





program, on the other hand, with its undifferentiated kindergarten approach obtained its primary objective: it produced higher level social-emotional maturity as well as facilitated "energetique" for the development of or the functioning of the cognitive structures. These results tend to support the findings of Pederson (1968), Zigler and Butterfield (1968), which imply that the removal of debilitating attitudes, values, and motivations may lead to heightened cognitive performance in the disadvantaged children (p. 3). The disadvantaged child has more intelligence than he is often credited (Zigler and Butterfield, 1968) and it is also conceivable that once the debilitating emotional blocks are removed the child becomes more ready to better utilize his existing cognitive skills and to improve them.

These statements do not claim primacy of the affect. The solution to the problem of the disadvantaged child's unreadiness for school does not lie in accepting an either-or proposition. What is suggested here is the incorporation of the concepts and the concerns of both approaches (Bronfenbrenner, 1962) and their utilization in attempting



to ameliorate this problem of the disadvantaged child. It is conceivable that in a united approach work with the affective domain may take priority since the affective make-up already is difficult to change in school age children (Atkinson, 1964; Hunt, 1961). Since the affective makeup is assumed to be responsible for eliciting particular responses and behaviours, (Abelson and Rosenberg, 1958; Rosenberg, 1960), the compensatory programs could begin by attempting to improve the affective motivational style of the disadvantaged so that it may provide the energetique for the cognitive structure.

This approach could conceivably resolve the affective-cognitive imbalance in the disadvantaged child's attitude toward school. The result could well be an affective and cognitive consistency regarded as a crucial factor in human development and functioning (Rosenberg, M. and Abelson, R. 1960) as well as in readiness for school.



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## APPENDICES





APPENDIX A

PRESCHOOL DEMONSTRATION PROJECT  
QUESTIONNAIRES



I wish to participate in the preschool program. Yes ☐  
 No ☐

---

EDMONTON SCHOOL READINESS PROGRAM  
 CHILD AND FAMILY QUESTIONNAIRE

Directions:

This questionnaire is designed to help us plan both programs and classes for the October Pre-school. We have tried to make the form brief and uncomplicated. All information you provide will be treated confidentially.

Please fill in or place a check mark ( ) opposite the statement which best represents your home and family.

THANK YOU

\*\*\*\* \*

Questions about your Child:

Name of child who is approximately five years of age

---

Child's Birthdate: Year  Month  Day   
 Sex: Boy  Girl

Does child have any physical difficulties which might make it hard for him (her) to participate in preschool program (for example, epilepsy, cerebral palsy, asthma, hard-of-hearing, partially sighted)

Yes  No

If yes, please describe:

---

Questions about your family:

Highest grade father completed in school  
 (include school attendance in countries other than Canada).

Elementary School	(Grades 1 - 6)	<input type="text"/>
Jr. High School	(Grades 7 - 9)	<input type="text"/>
High School	(Grades 10 - 12)	<input type="text"/>
College or University		<input type="text"/>



EDMONTON SCHOOL READINESS PROGRAM  
CHILD AND FAMILY QUESTIONNAIRE  
(Continued)

Highest grade mother completed in school

Elementary School	(Grades 1 - 6)	_____
Jr. High School	(Grades 7 - 9)	_____
High School	(Grades 10 - 12)	_____
College or University		_____

Language or languages spoken in the home: Italian \_\_\_\_\_

Ukrainian \_\_\_\_\_ French \_\_\_\_\_ German \_\_\_\_\_

English \_\_\_\_\_ Other \_\_\_\_\_.

If more than one language, which is spoken most often?

\_\_\_\_\_.

Number of rooms in your home (omitting bathrooms, porches, halls and kitchen if this is a separate room:

1\_\_\_\_ 2\_\_\_\_ 3\_\_\_\_ 4\_\_\_\_ 5\_\_\_\_ 6\_\_\_\_.

Approximate yearly income for your family: under \$3000.

\_\_\_\_\_; above \$3000, but under \$5000. \_\_\_\_\_;  
above \$5000. but under \$7000. \_\_\_\_\_; above \$7000.  
\_\_\_\_\_.





## PARENT INTERVIEW

1. Child's name \_\_\_\_\_ Nickname \_\_\_\_\_  
I.D. No. \_\_\_\_\_ Birthdate \_\_\_\_\_  
Yr. Mo. Date  
Sex (Check one only) Male Female .

## FAMILY

2. Father's name \_\_\_\_\_ Occupation \_\_\_\_\_ Age \_\_\_\_\_  
Living with child: Yes \_\_\_\_\_ No \_\_\_\_\_.
3. Mother's name \_\_\_\_\_ Occupation \_\_\_\_\_.  
Living with child: Yes \_\_\_\_\_ No \_\_\_\_\_.
4. Address of child \_\_\_\_\_ Telephone number \_\_\_\_\_
5. Dwelling: House \_\_\_\_\_ Duplex \_\_\_\_\_  
Apartment \_\_\_\_\_ Rooms \_\_\_\_\_.
6. Siblings in order of birth:
1. Name \_\_\_\_\_ Age \_\_\_\_\_ Sex: Male \_\_\_\_\_ Female \_\_\_\_\_  
In home: Yes \_\_\_\_\_ No \_\_\_\_\_.
2. Name \_\_\_\_\_ Age \_\_\_\_\_ Sex: Male \_\_\_\_\_ Female \_\_\_\_\_  
In home: Yes \_\_\_\_\_ No \_\_\_\_\_.
3. Name \_\_\_\_\_ Age \_\_\_\_\_ Sex: Male \_\_\_\_\_ Female \_\_\_\_\_  
In home: Yes \_\_\_\_\_ No \_\_\_\_\_.
4. Name \_\_\_\_\_ Age \_\_\_\_\_ Sex: Male \_\_\_\_\_ Female \_\_\_\_\_  
In home: Yes \_\_\_\_\_ No \_\_\_\_\_.
7. Others in home: Sex \_\_\_\_\_ Age \_\_\_\_\_ Relationship to  
child \_\_\_\_\_.
8. Have you moved within past year? Yes \_\_\_\_\_ No \_\_\_\_\_.  
Moving prior to June 1968 \_\_\_\_\_.
9. Did you register your child in a playschool before now?  
Yes \_\_\_\_\_ No \_\_\_\_\_.

## GENERAL DEVELOPMENT

10. Does child play with other children? Yes \_\_\_\_ No \_\_\_\_.  
Are these children: Brothers & Sisters \_\_\_\_\_  
Neighbor children \_\_\_\_\_?  
Are they generally: Younger \_\_\_\_\_ Older \_\_\_\_\_  
The Same \_\_\_\_\_ as child?



PARENT INTERVIEW  
(Continued)

11. Does child follow directions? Yes \_\_\_\_ No \_\_\_\_.  
Comment \_\_\_\_\_
12. Does child have any special fears? Yes \_\_\_\_ No \_\_\_\_.  
Comment \_\_\_\_\_
13. Favorite play activities: Games \_\_\_\_\_ T.V. \_\_\_\_\_  
Books and Stories \_\_\_\_\_.
14. What does he/she like best to do? \_\_\_\_\_
15. Is child easily excited? Yes \_\_\_\_ No \_\_\_\_.  
A worrier? Yes \_\_\_\_ No \_\_\_\_.
16. When did he/she begin:  
Walking: Approx. Age \_\_\_\_ Was this early \_\_\_\_ Late \_\_\_\_  
Average \_\_\_\_ Not yet doing \_\_\_\_.  
Dressing: Approx. Age \_\_\_\_ Was this early \_\_\_\_  
Late \_\_\_\_ Average \_\_\_\_ Not yet doing \_\_\_\_.  
Tie Shoes: Approx. Age \_\_\_\_ Was this early \_\_\_\_  
Late \_\_\_\_ Average \_\_\_\_ Not yet doing \_\_\_\_.
17. How mature do you feel child is? Below Others \_\_\_\_  
About the same \_\_\_\_ Above \_\_\_\_.



## SPEECH AND LANGUAGE QUESTIONNAIRE

Child's Name \_\_\_\_\_ I.D. Number \_\_\_\_\_ Date \_\_\_\_\_

1. Did child cry excessively after birth? Yes \_\_\_\_ No \_\_\_\_  
Was there a reason for this? \_\_\_\_\_
2. Did child make play noises as a baby? Yes \_\_\_\_ No \_\_\_\_  
At what age did child do this? \_\_\_\_\_. Did child stop suddenly? Yes \_\_\_\_ No \_\_\_\_\_. At what age did he stop? \_\_\_\_\_.
3. As a baby did child imitate sounds made by: dogs, cats, cows, etc.? Yes \_\_\_\_ No \_\_\_\_.
4. Did child imitate sounds made by adults? Yes \_\_\_\_ No \_\_\_\_  
At what age did he do this? \_\_\_\_\_
5. At what age did child say first word? \_\_\_\_\_  
Talk? \_\_\_\_\_ Was this: early \_\_\_\_\_ late \_\_\_\_\_  
about average \_\_\_\_\_?
6. Explain how speech developed after first word: \_\_\_\_\_  
\_\_\_\_\_
7. Does child understand what you say? Yes \_\_\_\_ No \_\_\_\_.  
If no, please describe \_\_\_\_\_  
Do you know why? \_\_\_\_\_
8. Does child have trouble understanding other people?  
Yes \_\_\_\_ No \_\_\_\_\_. If yes, please describe \_\_\_\_\_
9. When you don't understand what he/she says, what does child do? \_\_\_\_\_
10. How does child express wants when you don't understand him? \_\_\_\_\_
11. Does child talk as well as other children his/her age?  
Yes \_\_\_\_ No \_\_\_\_.



SPEECH AND LANGUAGE QUESTIONNAIRE  
(Continued)

12. What speech sounds does he/she have trouble with?

---

13. What are some words that the child has difficulty with?

---

14. Does child repeat sounds or words as he/she talks?

Yes \_\_\_\_ No \_\_\_\_ . How often does this happen?

seldom \_\_\_\_\_ frequently \_\_\_\_\_ all the time \_\_\_\_\_ .

15. Additional comments concerning your child's speech:

---

---





## EDUCATIONAL ASSESSMENT RECORD

Child's Name \_\_\_\_\_ I.D. Number \_\_\_\_\_ Today's Date \_\_\_\_\_

Birthdate \_\_\_\_\_ Age \_\_\_\_\_  
                     Year           Month           Day           Years       Months

Test Scores

Test	M.A.	I.Q.	Comment
COLUMBIA			

RAVEN

PEABODY

OTHER

Subjective Evaluation (suitability for program)

Intellectual Efficiency

Low \_\_\_\_\_ High

Emotional Maturity

Low \_\_\_\_\_ High

Physical Maturity

Low \_\_\_\_\_ High

Comments



## APPENDIX B

### SOCIAL BEHAVIOUR SCALE



## CHILDREN'S BEHAVIOR CHECK-LIST

Name \_\_\_\_\_ School or Agency \_\_\_\_\_

Age \_\_\_\_\_ Grade \_\_\_\_\_ Sex \_\_\_\_\_ Time of Day \_\_\_\_\_

Birthdate \_\_\_\_\_ Checker \_\_\_\_\_

Directions: Check only those statements which you feel are really true of the child. Do not guess if you are not reasonably sure.

1. ( ) Vigorous and energetic in his attack on a project.
2. ( ) Over-cautious, not venturesome, afraid to attempt the untried.
3. ( ) Nearly always accomplishes task in spite of difficulties.
4. ( ) Voice animated, alive.
5. ( ) Does not become fatigued easily.
6. ( ) Poor in concentration.
7. ( ) Merely copies other children's reactions, not original.
8. ( ) Concentrates well at his task.
9. ( ) Original and inventive reactions.
10. ( ) Curious and questioning.
11. ( ) Expresses himself well for his age.
12. ( ) Resourceful in dealing with difficult situations.
13. ( ) Poor use of language for his age.
14. ( ) Patient.
15. ( ) Absorbed; self-sufficient in his activity.
16. ( ) Restless - a certain dissatisfaction with his own activity.
17. ( ) Retiring; wishes to be in the background.
18. ( ) Even-tempered.
19. ( ) Frequently disturbed; easily upset by the disagreeable or exciting.
20. ( ) Seldom disturbed; sudden changes in mood infrequent.
21. ( ) Slow to adjust to a novel experience.
22. ( ) Original in play.
23. ( ) Is easily distracted from task at hand.
24. ( ) Gives up easily, lacks persistence.





CHILDREN'S BEHAVIOR CHECK-LIST  
(Continued)

- 25. ( ) Submits to any child who takes the initiative.
- 26. ( ) Dominates children of his own age (either sex).
- 27. ( ) Will submit to a specific child only.
- 28. ( ) Submits to a leader only after a struggle to dominate.
- 29. ( ) Is a follower in one specific group only.
- 30. ( ) Occasionally dominates a group.
- 31. ( ) Usually leads a small group.
- 32. ( ) Decides who shall participate in the group activities.
- 33. ( ) Can organize the activities of a group to carry out a definite purpose.
- 34. ( ) Leads or follows as the occasion demands.
- 35. ( ) Neither leads nor follows; plays alone.
- 36. ( ) Dominates other children through his ability to talk effectively.
- 37. ( ) Dominates other children through their love or admiration for him.
- 38. ( ) Dominates other children through his wealth of ideas.
- 39. ( ) Definitely schemes to get others to carry out his plans.
- 40. ( ) Gives commands with an air of finality.
- 41. ( ) Helpless unless someone organizes activity for him.
- 42. ( ) Hesitates to initiate activity.
- 43. ( ) Usually follows the ideas of others for activity.
- 44. ( ) Usually has his own ideas for activity.
- 45. ( ) Usually takes the initiative.
- 46. ( ) Does not push the issue in case of opposition.
- 47. ( ) Fights for his place as leader.
- 48. ( ) Insists that other children do as he wishes.
- 49. ( ) Does not defend his own rights with other children.
- 50. ( ) Easily led into mischief by others.
- 51. ( ) Fails to secure co-operation when he tries to direct activities.
- 52. ( ) Gets willing co-operation easily.
- 53. ( ) Almost never laughs or smiles.
- 54. ( ) Has an unusually good sense of humor.



CHILDREN'S BEHAVIOR CHECK-LIST  
(Continued)

- 55. ( ) Has a way of making an appeal with his eyes.
- 56. ( ) Has a pleasing manner of speech.
- 57. ( ) Thoughtful of others.
- 58. ( ) Sympathetic nature.
- 59. ( ) Inconsiderate of others.
- 60. ( ) Moderately selfish.
- 61. ( ) Polite.
- 62. ( ) Mischievous.
- 63. ( ) Brave when hurt.
- 64. ( ) Truthful.
- 65. ( ) Seldom cries.
- 66. ( ) A good sport.
- 67. ( ) Rough and ready.
- 68. ( ) Forgiving nature.
- 69. ( ) Wanders around aimlessly.
- 70. ( ) Self-conscious.
- 71. ( ) Intelligently co-operative.
- 72. ( ) Often shows off or acts silly.
- 73. ( ) Makes pleasant conversation with adults.
- 74. ( ) Unaffected, spontaneous, natural.
- 75. ( ) Imaginative.
- 76. ( ) Lacks imagination.
- 77. ( ) Eager to try new things.
- 78. ( ) Seems to have a plan for every minute.
- 79. ( ) Brimming over with ideas for activity.
- 80. ( ) Plays or works vigorously.
- 81. ( ) Haphazard methods of work or play.
- 82. ( ) Lacks self-confidence.
- 83. ( ) Adjusts immediately to the daily routine.
- 84. ( ) Always goes through the daily procedure willingly.
- 85. ( ) Has to be constantly urged to carry out routine activities.
- 86. ( ) Takes a long time to adjust to the daily routine.
- 87. ( ) Responds readily to direction in the day's routine.
- 88. ( ) Proceeds as usual with routine in the presence of visitors.
- 89. ( ) Is businesslike and systematic in endeavoring to carry out routine activities.



CHILDREN'S BEHAVIOR CHECK-LIST  
(Continued)

- 90. ( ) Dawdles over routine activities.
- 91. ( ) Always co-operates in trying to keep the school-rooms neat and clean.
- 92. ( ) Perfectly natural in the presence of adults.
- 93. ( ) Matter of fact in his relations with adults.
- 94. ( ) Independent of adult in overcoming difficulties.
- 95. ( ) Dependent upon adult to solve difficulties.
- 96. ( ) Independent of adult in having ideas about or planning work or play activities.
- 97. ( ) Resents aid from adults.
- 98. ( ) Pays no attention to visitors.
- 99. ( ) Bids for attention from adults.
- 100. ( ) Craves affection from adults but is afraid to show it.
- 101. ( ) Beautiful features.
- 102. ( ) Unusually pleasant facial expression.
- 103. ( ) Expressive eyes.
- 104. ( ) Stands erect.
- 105. ( ) Walks with ease and grace.
- 106. ( ) Does not take possessions of other children without permission.
- 107. ( ) Takes good care of school property while using it.
- 108. ( ) Wants to keep a particular piece of equipment even if not using it himself.
- 109. ( ) Gives up equipment to other children as soon as finished with it.
- 110. ( ) Extreme sense of property rights and keen desire to see this enforced.
- 111. ( ) Shows extreme consideration for school property.
- 112. ( ) Shows extreme consideration for possessions of others.
- 113. ( ) Takes good care of his own possessions.
- 114. ( ) Takes good care of the possessions of other children.
- 115. ( ) Adds co-operative additions to the suggestion.
- 116. ( ) Lags in following suggestion.
- 117. ( ) Responds without undue delay to authority.
- 118. ( ) So absorbed in his own thoughts that does not comprehend.





CHILDREN'S BEHAVIOR CHECK-LIST  
(Continued)

- 119. ( ) Co-operative and responsible.
- 120. ( ) Makes friends with other children easily.
- 121. ( ) Finds it difficult to approach other children and make friends.
- 122. ( ) Makes friends with any child who happens to be around him.
- 123. ( ) Resents interest shown by other children; wants to be left alone.
- 124. ( ) Does not respond to friendly advances.
- 125. ( ) Tries to make entry into group of children but fails.
- 126. ( ) Unhappy if he is not playing with other children.
- 127. ( ) So absorbed in his own ideas that he pays no attention to other children.
- 128. ( ) Contributes to the ideas of the group though not a leader (co-operative companion).
- 129. ( ) Hesitant in making suggestions to other children.
- 130. ( ) Assumes a protective attitude towards other children (Underline: Same sex, opposite sex).
- 131. ( ) Usually pleasant with other children.
- 132. ( ) Often abrupt and surly with other children.
- 133. ( ) Has a pleasant manner of securing co-operation from other children.
- 134. ( ) Has strong likes and dislikes for other children.
- 135. ( ) Rather placid attitude toward other children; neither likes nor dislikes them to any degree.
- 136. ( ) Quarrels with other children often over trivial things.
- 137. ( ) Seldom quarrels with other children over trivial matters.
- 138. ( ) Rough and mean with other children.
- 139. ( ) Hurts other children often due to carelessness.
- 140. ( ) Impatient with other children.
- 141. ( ) Very critical of other children.
- 142. ( ) Is a good sport when he loses to some other child.
- 143. ( ) Is sympathetic toward other children.
- 144. ( ) Affectionate toward other children.
- 145. ( ) Tries to help the smaller children.





CHILDREN'S BEHAVIOR CHECK-LIST  
(Continued)

- 146. ( ) Resents aid from other children.
- 147. ( ) Forgiving of other children who have hurt him, taken his belongings, etc.
- 148. ( ) Tries to get even with a child with whom he is angry.
- 149. ( ) Talks to other children a great deal.
- 150. ( ) Seldom talks to other children.
- 151. ( ) Cries easily in playing with other children.
- 152. ( ) Generous in letting other children share activities and possessions.
- 153. ( ) Attention from other children leads him to "show off" or act silly.
- 154. ( ) Not jealous if other children play with his particular friends.
- 155. ( ) Faces the issue squarely.
- 156. ( ) Concentrates his energy to accomplish a difficult task.
- 157. ( ) Meets situations in a quiet, matter of fact manner.
- 158. ( ) Dawdles to avoid a difficult task.
- 159. ( ) Accepts necessary facts as a matter of course.
- 160. ( ) Does the best he can with what he has.
- 161. ( ) Recognizes and accepts the superiority of another child.
- 162. ( ) Accepts just criticism willingly.
- 163. ( ) Finds it difficult to accept just blame from his faults.
- 164. ( ) Regresses to babyish behavior in the face of difficulty.
- 165. ( ) Quietly accepts success.
- 166. ( ) Knows when he has done a task well.



# SOCIAL BEHAVIOR PROFILE

Name \_\_\_\_\_ Age \_\_\_\_\_ Rater \_\_\_\_\_

Irresponsible, Impulsive																		Responsible, Depen- dable
Withdrawing, Avoids Taking Leadership Role																		Socially Dominant, Forceful
Insecure, Self-Protective																		Secure, Relaxed
Domineering, Bossy																		Cooperative, Socially Adaptable
Isolate, Not Sociable																		Sociable, Friendly
Inconsiderate																		Kind, Gentle, Generous
Dependent, Unresourceful																		Independent, Resource- ful











